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Our Founding Fathers were also Gardeners

In our July Issue, we wanted to take a quick look back in history to see how horticulture and gardening impacted and shaped our country. Many Americans think of our founding fathers as incredible statesmen, intellectuals, and war heroes spending enormous energy on securing the future of our young country. But combined with all of their political expertise, they also possessed immense knowledge in horticulture, gardens and farming practices with the belief that agriculture and self-sufficiency would be the backbone of a new and thriving country.

George Washington could not wait to get back to his gardens once he had finished his final term of office as President. Most American gardens in the 18th century were modeled after the formal English and French gardens. But Washington, from his years as a surveyor, saw first hand the potential of using native plants and trees for gardens and landscapes. Once he was convinced that a more natural landscape was also more American, he ripped out huge portions of his estate making them less formal. He was an avid designer and planter, spending hours riding his estate and supervising. Mount Vernon gardens eventually became one of the first ornamental gardens planted with only native species.

Thomas Jefferson, like Washington, was a large landowner and originally modeled his estate Monticello like the formal gardens he saw in Europe. He even spent weeks touring English gardens with John Adams to learn more about gardens, plants, and trees. But what he saw there changed him forever. The irony was that many of the English gardens had become American gardens using mostly native American species. Once back in America, he embarked on redeveloping Monticello using only native species to combine beauty and utility. He kept copious notes on seeds, planting techniques, growth, and harvests to help him create a better American garden.

Benjamin Franklin believed that the only way the colonist could be self-sufficient was to rely on the endless natural resources in America. His interests in plants were both scientific and practical as he also viewed them for their economic value. Due to his interest in plants, he became quite the collector of seeds, exchanging not only with other Americans but also with the English. At this time, there was a vast seed exchange going on between the new world and the old. If you look up the great John Bartram, you will find that he was the first prominent nurseryman in America who provided seed boxes to not only Franklin but to many English gardeners, which explains why Jefferson and Adams saw so many American species in the English landscapes.

John Adams was not a prominent landowner like Washington or Jefferson. He only owned a small 40-acre farm in Massachusetts, not a sprawling estate. His garden was not an ornamental estate garden but a typical kitchen garden full of fruit and vegetables. Of all the founding fathers, he was probably the most hands-on gardener spending hours digging in the dirt, pruning, and planting experimental vegetables. He relished his garden time so much that when he was away during political events, he became restless and would go for long walks out in the countryside.

This is just a small snapshot of the contributions our founding members brought to the beginning of our country besides politics and government. If you want to read further about how horticulture and nature helped shaped our nation, please read Andrea Wulf's excellent book, [Founding Gardeners](#).



Happy 4th of July!

Historical Origins of American Vegetables

Have you ever wondered what the origin is of your beloved vegetables? Below is a quick look at some of our most popular vegetables in America, where they originated from and how they became popularized into American cuisine:



Potato: 350 millions years ago the potato slowly started to evolve from the deadly nightshade plant into its current form in the South American Andean highlands between Peru and Bolivia. The Spanish explorers in the 16th century brought it back from the new world to Europe where it was first viewed suspiciously because it was grown underground. However, the potato became acceptable when European armies were looking for an easy-to-transport sustainable food. It quickly caught on all over Europe but was not considered part of the American diet until the 1870's when a disease resistant hybrid potato was developed. Up to that point, the potato was considered food for horses and livestock.



Carrot: The carrot's origins can be traced to ancient Iran and Afghanistan as far back as 3000 B.C. It was not the tasty orange vegetable we grow today but rather a bitter plant in colors of black, white, red and purple. Purple carrots were placed in ancient Egyptian tombs where they were considered medicinal. The sweetness and orange color came from the Netherlands as a tribute to the House of Orange during the 17th century. The modern carrot was not consumed in the United States until World War I soldiers came home to rave about them. They were pushed as a victory garden vegetable during World War II in England and included into American cuisines after the war.



Tomato: Once again we can look to South America for the origins of the tomato. It also evolved from the deadly nightshade plant. The Aztecs were using it in their cuisine when Hernan Cortes brought the seeds back to Europe. Like the potato, the tomato was viewed suspiciously as unhealthy and unfit to consume for many years. The Italians in the 16th century only used it as a table top decorative fruit. While the tomato was making its way around the world, the Americans did not cultivate or consume it until a botanist in the 1870's spent his life developing the breed we eat today.



Cucumber: Part of the gourd family, cucumbers were originally from the wilds of India around 4000 years ago. It quickly spread across the world where it were embraced by the Romans as part of their cuisine and used medicinally. Unlike the vegetables above, this time the European explorers in 1494 brought the cucumber to the new world where it was planted and distributed by the Spanish. In the 1800's it was introduced to native Indians who quickly saw the potential in growing such an easy vegetable. It lost its popularity in the 18th century due to misguided concepts that it was not healthy to consume which was reversed in the 19th century back into American diets.



Onion: The onion is really number one as the oldest cultivated vegetable in history. It is believed to have originated in ancient Asia but quickly spread throughout the ancient world. Because it was easy to grow in almost any soil type and had enormous nutritional value, it quickly entered into several religious ceremonies in the ancient world. It was described many times in the Bible by the Israelites. As it reached European countries during the middle ages, it was the main staple for diet and medicinal purposes. When world exploration started it was carried to all parts of the new world to become a staple in many diets.

History of the Three Sisters Garden

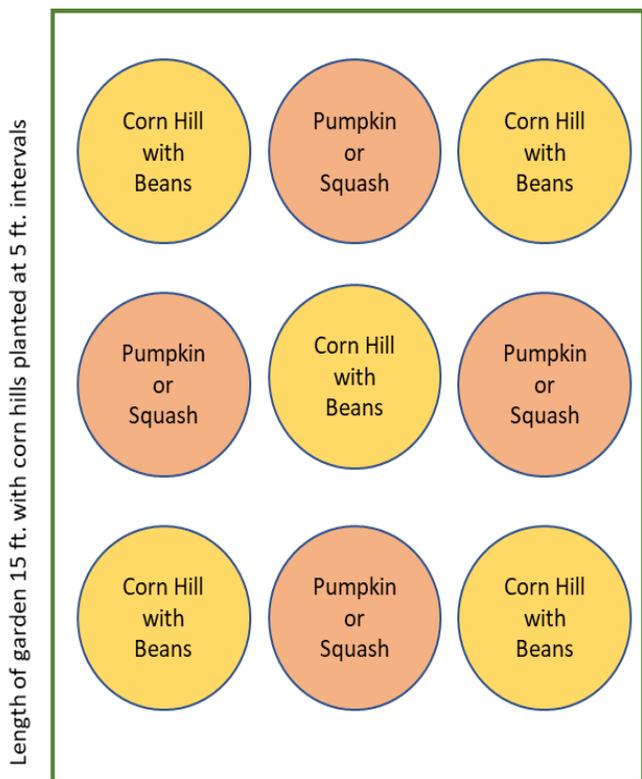
Ever hear of the Three Sisters Garden? It's a gardening technique developed by the Native Americans and subsequently introduced to the Pilgrims after they arrived in the New World. Not familiar with farming or how to survive in their new environment, the Pilgrims ended up depending on the nearby Patuxet Indians for survival techniques in hunting, gathering, and gardening. In fact, it was introduced by a famous Patuxet Indian named Squanto who taught them the Indian tradition of growing corn, squash, and beans together, which has become known as the **Three Sisters Garden**.

While many Americans today think of Native Americans as wanderers moving from one place to another, the East Coast Native Americans were more stationary learning how to adapt the land to growing food. It's these Indians who first realized how well the "sisters" grew together, providing a productive and healthy diet.

Purpose of the Three Sisters Garden: The Three Sisters Garden is companion gardening at its best where the plants grow together to deter weeds and pests, enrich the soil, and provide support. Each "sister" contributes something unique to the group to ensure their success:

- Corn is often referred to as the **Older Sister** since it provides support for the beans.
- Pole Beans, often called the **Giving Sister**, enriches the soil with needed nitrogen, which benefits all the plants.
- Squash (or pumpkin), the **Protective Sister**, provides a tangle of vines and prickly leaves that shade the soil, prevent weeds, and deter animals like raccoons who don't like to step on the spikey leaves.

Layout of a Three Sisters Garden: There are different variations on the Three Sisters method, but basically, it requires planting the "sisters" in clusters on low wide mounds instead of traditional straight rows.



Width of garden 15 ft. with corn hills planted at 5 ft. intervals

How to Plant: (see diagram)

- Plant the corn seeds in the hills spaced 5 feet apart, planting 4 seeds per hill. Each hill should be 18" in diameter.
- Wait until the corn plants are at least 4-6" tall before planting the bean or pea seeds. Plant in between the corn at the base on the same hill.
- At the same time plant the pumpkin or squash seeds using the same hill method. Each hill is again 18" in diameter with 4 seeds per hill.

When to Plant: March and April are the best time to plant the Three Sisters, but if you missed the spring planting season, you can sow a modified version of the Three Sisters now. From mid-July through early August, gardeners can plant corn. In late August, you can plant lima beans or snap beans. Instead of winter squash, which should be sown by late July in order to ripen by fall, you can intersperse your corn and beans with cucumbers.

Types of Seeds to Plant:

- Pole Beans, Peas, Sweet Peas
- Sweet Corn
- Summer Squash, Winter Squash, Pumpkin, Cucumbers

Okra—African Contribution to American Gardens



There are scarce written accounts in ancient texts that mention okra (*Hibiscus esculentus*), so its origins are clouded in a bit of mystery. The Moors encountered it in 12th century Egypt and around the Mediterranean. Many scholars now agree that it probably originated from Ethiopia, where it was used extensively for food and medicine. It was often called gumbo which was believed to be a corruption of the Portuguese word, *quingombo*, or the word *quillobo*, the native name for the plant in the Congo and Angola area of Africa.

Okra probably was introduced to the Southern United States at the beginning of the slave trade in the 1500s. Okra, like rice, black-eyed peas, beans, and millet, were one of the few foods the slaves were able to bring with them from their homes in Western Africa. There are even accounts of mothers braiding okra and other seeds into their children's hair to provide them with future sustenance in the new unknown land. After arriving in the New World, the slaves grew okra in their personal gardens and incorporated it into their cooking. It was slowly introduced into southern cuisine by the plantation slave cooks. Because of its thickening ability, it became the main staple of stews, gumbo, and roux in creole cooking. By 1748 it was grown as far north as Philadelphia, and Thomas Jefferson wrote about it by 1781.

The popularity of okra spread because of its agricultural viability. As part of the mallow family, it's also related to cotton, hibiscus, and hollyhocks. It thrives in the extended southern summers growing up to six feet tall producing 20 pods per plant per week.

In some lands the seeds rather than the whole young pods are of more interest. When ripe the seeds yield an edible oil that is the equal of many others extensively used. In fact, in some countries today it's used extensively as a cooking oil.

The ripe seeds of okra are sometimes roasted and ground as a substitute for coffee. A close relative of okra, roselle, is used as a source of fiber for cloth. In Turkey, the leaves are used to soothe or reduce inflammation.

Like many incorporated vegetables in American cuisine, we can look to the African slaves for their delicious contributions.



Other African Foods that made it to America

- **Black-eyed Peas:** Angola, Ethiopia, Nigeria, Senegal
- **Coffee:** Ethiopia
- **Kola Nuts:** Nigeria, Ghana, Sierra Leone
- **Watermelon:** Egypt, South Africa
- **Yam:** West Africa
- **Cumin:** Egypt and Mediterranean
- **Millet:** Nigeria

Garden Tools of the Past

Many gardening tools from the past are still used today: spades and shovels being the most predominant. There are even written records of wheelbarrows being used in ancient texts. But today, due to advanced technology, many of the old garden tools are more collectible than useable. Here are a few— a couple are pretty strange:



Scythe: The scythe was invented in about **500 BC** and appeared in Europe during the 12th and 13th centuries. Initially used mostly for mowing grass, it replaced the sickle as the tool for reaping crops as it allowed the user to stand rather than stoop. This labor-intensive tool was eventually replaced by tractors and mowers. While not completely unknown today, they are now a collector's item instead of a gardening tool.



Sickle: Cousin to the scythe, the sickle is one of the oldest tools used by humanity to harvest crops. The sickle has been carbon dated all the way back to the iron age with large quantities of sickle blades being excavated in sites surrounding Israel dating to **18,000-8,000 BC**. Used like the scythe but smaller for harvesting crops and cutting grasses.



Garden Syringe: Still being used by a few, the garden syringe was mainly used in the past to spread insecticides.



Cucumber Straightener: The cucumber straightener was invented by the English engineer George Stephenson in the 19th century out of blown glass. It was developed due to the obsessiveness of English gardeners at the time — mainly for competitions. The developing cucumber was placed inside the glass tube to keep it straight. We're not quite sure how they got the cucumber back out!



Animal and Vermin Traps: In the 12th-century, traps were considered an essential gardening tool to keep animals and vermin away from the garden.



Dusting Bellows: This piece of equipment was used in the 18th century for scattering powdered lime, powdered tobacco leaves, or any other powder over plants to combat insects and pests.

Continuing Education

Due to the Covid-19 Pandemic, no continuing education classes are available in July except for virtual learning and webinars. Below are on-line classes made available for those members who need additional educational hours. Many are being offered as virtual classes on Facebook by Agrilife Water University in partnership with Texas A&M Agrilife Extension.

July 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 ★	2	3 ★	4
5	6	7	8 ★	9	10	11
12	13	14	15 ★	16	17	18
19	20	21	22 ★	23	24	25
26	27	28	29 ★	30	31	

Continuing Education

For registration information on Gardening on the Gulf Coast please contact: *Ginger Easton-Smith @vasmith@ag.tamu.edu*

- July 01: Gardening on the Gulf Coast Online Series, “Home Citrus Growing”, 10 a.m.
- July 01: AgriLife Extension, “Planning your Perfect 4th Celebration”, 1 p.m.—1:30 p.m., Online Event: www.facebook.com/Aggie-Horticulture
- July 03: AgriLife Extension: “How to Grow & Select Watermelons (Other Melons)”, 1 p.m.—1:30 p.m., Online Event: <https://aggie-horticulture.tamu.edu.fblive>
- July 08: Gardening on the Gulf Coast Online Series, “Young Tree Care”, 10 a.m.—11 a.m.
- July 15: Gardening on the Gulf Coast Online Series, “Cacti & Succulent Varieties”, 10 a.m.—11 a.m.
- July 22: Gardening on the Gulf Coast Online Series: “Fabulous Figs for the Gulf”, 10 a.m.—11 a.m.
- July 29: Gardening on the Gulf Coast Online Series: “EarthKind Pest, Disease & Weed Control”, 10 a.m.—11 a.m.

There are 10 virtual classes being offered in July by *Agrilife Water University in partnership with Texas A&M Agrilife Extension*. Please go to: <https://wateruniversity.tamu.edu/events>

There are 13 on-line training modules for Master Gardener Recertification at *Aggie Horticulture_EarthKind*. You can access them at: <https://aggie-horticulture.tamu.edu/earthkind/training/>.

Texas Master Gardeners can select from any of these on-line modules to obtain up to 3 hours of re-certification education credits in a calendar year. Each module is worth 1 hour of credit. Master Gardeners are not encouraged to seek re-certification credit for training modules they have completed in previous years.

Texas Master Gardeners

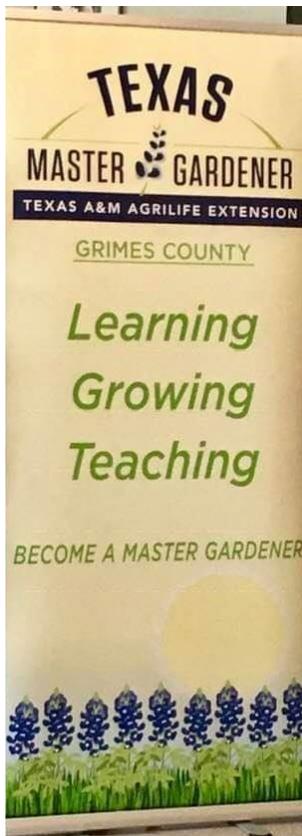
203 Veterans Memorial Drive
Navasota, Texas 77868

Website: txmg.org/grimes
Facebook: www.facebook.com/GrimesCountyMasterGardeners



Grimes County Master Gardeners

Please send submissions and photos by the 20th of each month to: pwparmley@gmail.com



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